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Application No.

98 950 704.1-2123

Ref.

D 1620 EP

Date

27.08.2002

Applicant

Epix Medical, Inc.

#### Communication pursuant to Article 96(2) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(1) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 78(2) and 83(2) and (4) EPC.

One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (Rule 36(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Article 96(3) EPC).



GIACOBBE S A Primary Examiner for the Examining Division

Enclosure(s):

3 page/s reasons (Form 2906)



Bescheid/Protokoll (Anlage)

Communication/Minutes (Annex)

Notification/Procès-verbal (Annexe)

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27.08.2002

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Anmelde-Nr.: Application No.: Demande nº:

98 950 704.1

The examination is being carried out on the following application documents:

Text for the Contracting States:

AT BE CH LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Description, pages:

1-22,24-64

as published

23,23a

as received on

21.05.2001 with letter of

21.05.2001

Claims, No.:

1-35

as received on

29.10.2001 with letter of

29.10.2001

Drawings, sheets:

1/3-3/3

as published

# 1. Art 123(2) EPC

The amended set of claims filed with the letter of 29.10.01 fulfills the requirements of Art 123(2), and is therefore accepted by the Examining Division as basis for the further prosecution of the present case.

### 2. Art 54 EPC (Novelty)

The present set of claims fulfills the requirements of Art 54 EPC since document D1 does not disclose the use of contrast agents for monitoring interventional therapy.

# 3. Art 56 EPC (Inventive step)

The present set of claims fulfills the requirements of Art 56 EPC. The following documents are relevant for the assessment of the presence of an inventive step:

D2: HYNYNEN K. ET AL.: 'The Usefulness of a Contrast Agent and Gradient-Recalled Acquisition in a Steady-State Imaging Sequence for Magnetic



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98 950 704.1

Resonance Imaging-Guided Noninvasive Ultrasound Surgery' INVESTIGATIVE RADIOLOGY, vol. 29, no. 10, 1994, pages 897-903

- D3: R.M.M. SEIBEL ET AL.: 'Image-guided minimally invasive therapy' SURGICAL ENDOSCOPY, vol. 11, no. 2, 1997, pages 154-162
- D4: HYNYNEN ET AL.: 'The feasibility of using MRI to monitor and guide noninvasive ultrasound surgery.' ULTRASOUND IN MED. AND BIOL., vol. 19, no. 1, 1993, pages 91-92
- D5: LAUFFER R B ET AL: 'MS-325: A SMALL-MOLECULE VASCULAR IMAGING AGENT FOR MAGNETIC RESONANCE IMAGING' ACADEMIC RADIOLOGY, vol. 3, no. SUPPL. 02, August 1996, pages S356-S358

Document D2 constitutes the closest prior art, since it describes the use of gadopentetate as contrast agent for MRI-guided non-invasive ultrasound therapy. Documents D3 and D4 further disclose the technique, but do not mention the use of contrast agents. The technical problem solved by the present application with respect to D2 can be formulated as "how to provide a better contrast agent for MRI-guided non-invasive ultrasound therapy, and the solution proposed is constituted by the use of classical contrast agents conjugated to a state-dependent tissue binding moiety (SDTBM). These contrast agents are known from D5, however this document is silent about their use for MRI-guided non-invasive ultrasound therapy. As explained by the Applicant in his letter of 29.10.01, the results shown in Tables 1-3 and Figures 1-3 demonstrate that surprisingly these conjugated contrast agents provide the distinct advantage that the MRI signal predictably decreases during a model of interventional therapy, whereas a non-targeted contrast agent (more precisely the one used in D2) produces unpredictable variations on total contrast. This constitutes a marked advantage of the former vs. the latter: inventiveness is acknowledged.

### 4. Other matter

<u>2.1</u> To meet the requirements of Rule 27(1)(b) EPC, documents D1-D5 should be identified in the description and the relevant background art disclosed therein should be briefly discussed.

The Applicant is invited to bring the description into conformity with the amended claims. Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends



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ir.: No.: 98 950 704.1

beyond the content of the application as originally filed (Article 123(2) EPC). In connection with this, the Applicant's attention is drawn to the fact that violation of Article 123 (2) EPC is ground for refusal of an application (Article 97(1) EPC).

**n.b.** The attention of the Applicant is drawn to the fact that the new claims correctly (in the sense of Arts 83 and 84 EPC) refer only to the use of MRI as monitoring technique. Uniformity of description and claims in this respect is essential.